

IN THE CLAIMS

Claims 1-13 are pending in this application. Please amend claims 1-6, 8-10 and 12-13, as follows:

1. (Currently Amended) A packet processing method, comprising the steps of:
providing a packet processing apparatus that incorporates a processor selector for extracting identification information that denotes a characteristic of a data flow composed of an input packet from said packet, a processing selecting table for holding a pair of data items that are identification information and a processing to be performed for said packet in advance, a table searcher for searching information in said processing selecting table according to a search key, which is identification information extracted by said processor selector, a packet processor for processing said packet according to a result of searching in said table, and a port selector for sending said processed packet;
extracting identification information that denotes a characteristic of a data flow composed of an input packet from the header information of said packet, wherein said packet processor is one of a plurality of types of packet processors, each being independent for a processing type to be performed for packets; and
wherein selecting a processing to be performed for the data of a packet in a packet flow is selected for each input packet flow.
2. (Currently Amended) The packet processing method according to claim 1[;], wherein said processing is selected according to an input line to which said packet flow is inputted.
3. (Currently Amended) The packet processing method according to claim 1[;], wherein said processing is selected according to an identifier included in said packet data.
4. (Currently Amended) The packet processing method according to claim 1[;], wherein said processing is selected by referring to a table where an input line to which said packet flow is inputted and a processing to be selected are corresponded to each other.

5. (Currently Amended) The packet processing method according to claim 1[;], wherein said processing is selected by referring to a table where an identifier included in said packet data and a processing to be selected are corresponded to each other.
6. (Currently Amended) The packet processing method according to claim 1[;], wherein a processing to be performed for packet data is at least one of encapsulation, decapsulation, encryption, decryption, compression, and expansion.
7. (Original) A packet processing apparatus, comprising:
 - a processor selector for extracting identification information that denotes a characteristic of a data flow composed of an input packet from said packet;
 - a processing selecting table for holding a pair of data items that are identification information and a processing to be performed for said packet in advance;
 - a table searcher for searching information in said processing selecting table according to a search key, which is identification information extracted by said processor selector;
 - a packet processor for processing said packet according to a result of searching in said table; and
 - a port selector for sending said processed packet.
8. (Currently Amended) The packet processing apparatus according to claim 7[;], wherein identification information that denotes a characteristic of a data flow composed of an input packet is extracted from the header information of said packet.
9. (Currently Amended) The packet processing apparatus according to claim 8[;], wherein said identification information that denotes a characteristic of said data flow is at least one of a source address and a destination address.
10. (Currently Amended) The packet processing apparatus according to claim 8[;], wherein said packet processor is one of a plurality of types of packet processors, each being independent for a processing type to be performed for packets.

11. (Original) A packet processing apparatus, comprising:
 - a processor selector for deciding the source of an input packet;
 - a processing selecting table for holding a pair of data items that are identification information and a processing to be performed for said packet in advance;
 - a table searcher for searching information in said processing selecting table according to a search key, which is a source of said packet decided by said processor selector;
 - a packet processor for processing said packet according to a result of searching in said table; and
 - a port selector for sending said processed packet.
12. (Currently Amended) The packet processing apparatus according to claim 11[;], wherein an input line to which said packet is inputted is decided as the source of said packet.
13. (Currently Amended) The packet processing apparatus according to claim 11[;], wherein the source of said inputted packet is decided according to the header information of said packet.